

REMARKS

Reconsideration of this application is respectfully requested in view of the foregoing amendment and the following remarks.

By the foregoing amendment, claims 1 and 11 have been amended and claims 7-10 have been canceled without prejudice or disclaimer for filing in a continuation application. Claims 3 and 4 have been withdrawn from consideration. Thus, claims 1, 2, 5, 6 and 11 are currently pending in the application and subject to examination.

In the outstanding Office Action, claims 1, 2, 5-8 and 11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Amano et al., U.S. Patent No. 6,909,813 in view of Kawakami et al., U.S. Patent No. 5,331,411 (hereinafter, "Kawakami"). It is noted that claims 7-10 have been canceled, and claims 1 and 11 have been amended. To the extent that the rejection remains applicable to the claims currently pending, the Applicants hereby traverse the rejection, as follows.

Independent claims 1 and 11 have been amended, in part, to include the subject matter of claim 10, which has been canceled. Thus, independent claims 1 and 11 recite, among other features, a feature wherein the contour enhancement is not performed if a largest differential among each said differential and a smallest differential among each said differential have opposite signs but have an identical absolute value.

The Office Action asserts that Hamada discloses the above feature at column 4, lines 64-67 and column 6, lines 54-58. In the cited portions, Hamada teaches identifying a flat field where the output of the first coring processor 2e functioning as an index is "0", and teaches reproducing such flat field directly. This first coring processor 23 as taught by Hamada produces an output that remains "0" up to a predetermined

input level, and then increases as the input value increases further (see *Hamada*, column 4, lines 60-63). The input value is the maximum value of the absolute differences detected by the maximum value detector 2d (see *id.*, at column 4, lines 52-54). However, *Hamada* does not disclose or suggest that the contour enhancement is not performed if a largest differential among each said differential and a smallest differential among each said differential have opposite signs but have an absolute value, as recited in independent claims 1 and 11, as amended.

Neither Amano nor Kawakami cure the deficiencies of *Hamada* noted above.

Accordingly, none of the applied art of record, nor any combination thereof, discloses or suggests at least the features of a differential calculating unit which obtains a differential between a value of a pixel of interest and a value of an adjacent pixel with respect to each of four neighboring pixels contained in an image signal supplied from an image sensor; a dead-zone generating unit which defines a predetermined range of pixel values; and a comparison unit which checks whether the differential falls outside the predetermined range with respect to each of the four neighboring pixels, wherein contour enhancement is applied to the pixel of interest in response to a determination by the comparison unit that the differential falls outside the predetermined range with respect to at least one of the four neighboring pixels, wherein said enhancement value generating unit selects a differential having a largest absolute value among each said differential corresponding to the four neighboring pixels, and performs said contour enhancement in response to size of the differential having the largest absolute value, and wherein said contour enhancement is not performed if a largest differential among each said differential and a smallest differential among each said differential have

opposite signs but have an identical absolute value, as recited in independent claim 1, as amended.

Similarly, none of none of the applied art of record, nor any combination thereof, discloses or suggests at least the features of obtaining a differential between a value of a pixel of interest and a value of an adjacent pixel with respect to each of four neighboring pixels contained in an image signal supplied from an image sensor; defining a predetermined range of pixel values; checking whether the differential falls outside the predetermined range with respect to each of the four neighboring pixels; and applying contour enhancement to the pixel of interest in response to a determination that the differential falls outside the predetermined range with respect to at least one of the four neighboring pixels, wherein a differential having a largest absolute value among each said differential corresponding to the four neighboring pixels is selected, and said contour enhancement is performed in response to size of the differential having the largest absolute value, and wherein said contour enhancement is not performed if a largest differential among each said differential and a smallest differential among each said differential have opposite signs but have an identical absolute value, as recited in independent claim 11, as amended.

For at least these reasons, the Applicant submits that independent claims 1 and 11 are allowable over the applied art of record. As claim 1 is allowable, the Applicant submits that claims 2, 5 and 6, which depend from allowable claim 1, are likewise allowable for at least the reasons set forth above with respect to claim 1.

Rejoinder of Withdrawn Claims

As noted in the Response of March 6, 2007, the Applicant submits that claims 1, 2 and 7-11 are generic. Therefore, the Applicant, upon the allowance of generic claim 1, respectfully requests rejoinder of claims 3 and 4, as provided by 37 C.F.R. § 1.141.

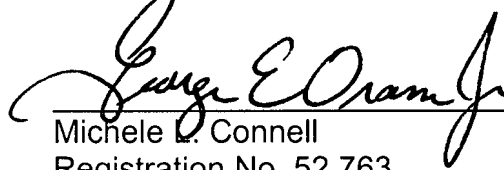
Conclusion

For all of the above reasons, it is respectfully submitted that claims 1, 2, 5, 6, and 11 are in condition for allowance and a Notice of Allowability is earnestly solicited.

Should the Examiner determine that any further action is necessary to place this application into better form, the Examiner is invited to contact the undersigned representative at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants hereby petition for an appropriate extension of time. The Commissioner is hereby authorized to charge any fee deficiency or credit any overpayment associated with this communication to Deposit Account No. 01-2300 referencing client matter number 100353-00170.

Respectfully submitted,
Arent Fox LLP


Michele L. Connell
Registration No. 52,763

27931

Customer No. 004372

1050 Connecticut Ave., N.W.
Suite 400
Washington, D.C. 20036-5339
Telephone No. (202) 857-6104
Facsimile No. (202) 857-6395
MLC:cdw

Enclosures: Petition for Extension of Time